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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,141	01/16/2002	Tetsuo Yamaguchi	2870-0177P	3642

2292 7590 05/05/2003

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EXAMINER

CHEA, THORL

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 05/05/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant N .

10/046,141

Applicant(s)

YAMAGUCHI, TETSUO

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (Ito) in view of JP11-149136 (JP'146) and Adin et al (Adin).

Ito a photothermographic material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound of formula (1) to (3) claimed in the present claimed invention, and the amount thereof is within 1×10^{-6} mol to 1 mol/mol of silver halide. Note to the compound of formula (1) to (3) in column 18 and the amount thereof in column 33, lines 22-25.

The JP'136 discloses a heat-developable material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound exemplified in the present application disclosure which is within the scope of formula (I) claimed in the present invention, and the amount thereof is from 1×10^{-6} mol to 1 mole/mol of silver halide. See the compound in column 1 (or Its English equivalent, US Patent No. 6,177,240, in columns 7-24; and in column 26, lines 37-40). This compound is is within the scope of formula (I), which contains nitrogen containing hetererocyclic compound, and the functional groups such as $-CO_2M$ which is within the scope of A-B of the formula (I). The compound provide photothermographic material

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high in Dmax and sensitivity, enhanced enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition.

Adin discloses a spectrally sensitizer within the scope of formula (I) of the claimed invention, and the amount thereof is from 1×10^{-8} to 2×10^{-3} mol per mol of silver in the emulsion layer. The compound is capable of enhancing both intrinsic sensitivity and the spectral sensitivity of the silver halide emulsion, and the activity of the compound can be easily varied with substituents to control their speed and fog effects in a manner appropriate to the particular silver halide in which they are used. Note to the compound in column 4, especially lines 26-38 and 55-65, and the amount thereof in column 60, lines 5-18.

The teaching in Ito discloses a photothermographic material containing compound of formula (1) to (3) and the compound inherently meets the conditions (i) to (iii) presented in the claimed invention. The compound in (iv), formula (1) to (3) has been known as nucleating agent, and the compound which meets criteria (i) to (iii) has been known as contrast enhancing agent such as hydrazine compound exemplified in Ito in column 37-80. See also the nucleating agent in column 23-32.

Ito fails to disclose the compound of formula (I) which however has been known and taught in JP'136 and Adin. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound taught in JP'136 to provide the photothermographic material with high in Dmax and sensitivity, enhanced enough in contrast, small in photographic performance due to fluctuation of

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development conditions and superior in effect of restraining dependence on development condition, or the compound taught in Adin in the material taught in Ito enhance both intrinsic sensitivity and the spectrally sensitivity of the silver halide emulsion to provide the invention as claimed.

Response to Arguments

3. Applicant's arguments filed March 4, 2003 have been fully considered but they are not persuasive. It is the Examiner's position that the claimed invention is prima facie obvious such as shown in the rejection above. The compound (iv) has been known as nucleating agent and the compound defined in (i) to (iii) include hydrazine compound taught in Ito. Note to the present specification on page 46 which disclosed that the compounds of (i) to (iii) include all of hydrazine derivative. The hydrazine and the nucleating agent has been used in combination to enhance the image contrast. The compound of formula (I) is within the scope taught in JP'136 and Adin, and the use thereof in the material of Ito would have been found obvious to the worker of ordinary skill in the art for the reason set forth above. The argument with respect to unexpected results is not persuasive. First, it is based on the Counsel's argument. Counsel's arguments cannot take the place of evidence. In re Greenfield, 571 F. 2d 1185, 197 USPQ 227 (CCPA 1978). Second, the results are irrelevant to the closest prior art of record, namely Ito. None of the comparative samples were prepared accordingly to the material taught in Ito. Third, the results would have expected from Ito. Note for instance the results shown in Ito, Table 23 in column 97-98 which show low Dmin, high Dmax and sensitivity.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (703)308-3498. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C.Baxter can be reached on (703)308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9301 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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Tchea *th*
May 2, 2003

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Thorl Chea
Primary Examiner
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